

AMENDMENTS TO THE CLAIMS

Please cancel claims 3 and 9, as follows:

Claims 1 - 9 (canceled)

10. (previously presented) A semiconductor device, comprising
a functional element having a first conductivity type semiconductor region provided in a semiconductor substrate, and a second conductivity type semiconductor region provided in contact with the first conductivity type semiconductor region and having a conductivity type different from that of the first conductivity type semiconductor region,

wherein a diode is provided in a boundary portion of a contact region to which an electrode is connected in the first conductivity type semiconductor region, the diode including a second conductivity type region embedded in the first conductivity type semiconductor region in a region crossing over a boundary of the contact region, the second conductivity type region having a conductivity type different from that of the first conductivity type semiconductor region, the second conductivity type region being in contact with the electrode in the contact region, and

wherein the functional element is a bipolar transistor which comprises a base region defined by the first conductivity type semiconductor region, and an emitter region defined by the second conductivity type semiconductor region.

11. (previously presented) A semiconductor device as set forth in claim 10, wherein a universal contact structure including the second conductivity type region is provided in contact with the electrode.

12. (previously presented) A semiconductor device, comprising:
a functional element having a first conductivity type semiconductor region provided in a semiconductor substrate, and a second conductivity type semiconductor region provided in contact with the first conductivity type semiconductor region and having a conductivity type different from that of the first conductivity type semiconductor region,
wherein a diode is provided in a boundary portion of a contact region to which an electrode is connected in the first conductivity type semiconductor region,
wherein the contact region has a generally C-shape or a ring shape which surrounds the second conductivity type semiconductor region on the surface of the first conductivity type semiconductor region, and
wherein a bonding region is defined on the first conductivity type semiconductor region for bonding a wire to the electrode, and the diode is provided at least in a part of the boundary portion of the contact region adjacent to the bonding region

13. (previously presented) A semiconductor device, comprising
a functional element having a first conductivity type semiconductor region provided in a semiconductor substrate, and a second conductivity type semiconductor region provided

in contact with the first conductivity type semiconductor region and having a conductivity type different from that of the first conductivity type semiconductor region,

wherein a diode is provided in a boundary portion of a contact region to which an electrode is connected in the first conductivity type semiconductor region,

wherein the contact region has a generally C-shape or a ring shape which surrounds the second conductivity type semiconductor region on the surface of the first conductivity type semiconductor region, and

wherein the functional element is a bipolar transistor which comprises a base region defined by the first conductivity type semiconductor region, and an emitter region defined by the second conductivity type semiconductor region.